

Resumption and gaps in English relative clauses: Relative acceptability creates an illusion of ‘saving’

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# **Resumption and Gaps in English Relative Clauses: Relative Acceptability Creates an Illusion of ‘Saving’<sup>1</sup>**

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## **Introduction**

Some languages, such as Hebrew, Arabic (multiple dialects) and Swedish, among others, employ resumptive pronouns (pronominal elements used in place of subject or object gaps) as an alternative to gaps in certain syntactic structures. Though resumptive pronouns are generally considered to be marginal in English, corpus studies (Prince 1990, 1997; Cann et al. 2004) have found that native speakers of English use resumptives in unguarded speech. The literature on resumptive pronouns has long asserted that they are capable of ‘saving’ island violations, meaning that an island structure that uses a resumptive in place of an illicit gap should be found more acceptable than the corresponding structure containing the gap instead of the resumptive (Ross 1986, Chomsky 1977, Sells 1984). Resumption has also been characterized as a ‘last resort’ strategy, used when movement violates a grammatical constraint (Rizzi 1990, Shlonsky 1992). This characterization suggests that resumptive pronouns should be acceptable only in environments where traces due to movement are ungrammatical.

Recent experimental findings have called into question the validity of the claim that resumptives improve the acceptability of island constructions at all (Alexopoulou and Keller 2007), though they may ameliorate the acceptability of structures where gaps cause ECP effects (McDaniel and Cowart 1999).<sup>2</sup> Through experimental examination of the interactions between structure type (islands,

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<sup>2</sup> In this paper, ECP effects refer to the generalization that, for the most part, it appears to be more difficult to extract from subject position than it is to extract from object position (see Rizzi 1990).

ECP-effects, both, and neither), resumption (resumptive pronoun or gap), and position (subject or object), I show that, rather than ameliorating island violations or ECP effects, resumptive pronouns in relative clauses (regardless of the presence or absence of embedded islands or ‘that’-clauses) have a steady, though marginal, level of acceptability whereas gaps in these different environments have varying levels of acceptability. Cases in which gaps create ECP effects and violate island constraints are found to be less acceptable than the corresponding structures containing resumptive pronouns, creating the illusion that a resumptive ‘saves’ a sentence in which a gap would be ungrammatical.

### 1 Resumptive Pronouns: Past Work

A resumptive pronoun is a pronoun used in place of a subject or object gap, as in the following corpus sentences:

- (1) a. “She got a couch at Sears that it was on sale.” (Cann et al. 2004:1554)  
 b. “He seems to agree with the claim that Chomsky made and which I think Labov was the one who disputed it.” (Prince 1997:6)

The analog of (1a) containing a gap is grammatical, and it is expected that speakers of English should find it to be acceptable, whereas the analog of (1b) contains an object gap within a relative clause island and is predicted to be unacceptable:

- (2) a. She got a couch at Sears that \_\_\_ was on sale.  
 b. \*He seems to agree with the claim that Chomsky made and which I think Labov was the one who disputed \_\_\_.

Past literature on resumptive pronouns in English claims that resumptive pronouns save island violations or function as a last resort for grammatical violations, suggesting that speakers should judge sentences like (1b) to be more acceptable than sentences like (2b).

English does not use resumption as extensively as do other languages. Sells (1984) notes that some languages, such as Hebrew, freely allow resumptive pronouns inside relative clauses while others, such as English, seem to allow resumptive pronouns in relative clauses only within syntactic islands (Sells 1984:6-11). Consider the following data:

- (3) a. *ze*            *ha’iš*            *še*            *oto*    *ra’iti*    *etmol*  
           this-is        the man        that        him    I-saw    yesterday  
           ‘This is the man that I saw yesterday’

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b. *ra'iti et ha'iš še natati li et*  
 I-saw the man that you-gave to-me the

*ha sefer še hu katav oto*  
 book that he wrote it

'I saw the man that you gave me the book that he wrote.'

- (4) a. \*This is the man that I saw him yesterday.  
 b. I'd like to meet the linguist that Mary couldn't remember if she had seen \_\_\_/him before.

In both Hebrew and English, resumptive pronouns are allowed in syntactic islands within relative clauses, as in (3b) and 4(b). However, (3a) and (4a) show that, while Hebrew plain relative clauses allow resumptive pronouns, English plain relatives do not generally seem to allow resumption.

Sells presents data from English in which resumptives and gaps are assumed to be equally acceptable, as for the weak island in (4b). He also addresses, however, the idea that resumption can save an ungrammatical sentence by replacing an illicit gap. Previous literature (Ross 1986) has focused on these apparent differences in acceptability between English sentences that (in at least some dialects) may contain resumptive pronouns and their illicit, gap-containing analogs, as in (5a-d) below:

- (5) a. I just saw that girl who Long John's claim that she was a Venusian made all the headlines. (Ross 1986:260)  
 b. All the students who the papers which they submitted were lousy I'm not going to allow to register next term. (Ross 1986:260)  
 c. I just saw that girl who Long John's claim that \_\_\_ was a Venusian made all the headlines.  
 d. All the students who the papers which \_\_\_ submitted were lousy I'm not going to allow to register next term.

The sentences with resumptive pronouns (5a-b) are claimed to be more acceptable than corresponding structures (5c-d). This phenomenon can be explained by attributing resumptive pronouns with a saving function for islands (Chomsky 1977, Sells 1984) or a last resort function for movement that violates a constraint on grammaticality (Rizzi 1990, Shlonsky 1992).

Rizzi (1990) and Shlonsky (1992) considered sentences in which a gap creates an ECP effect while its resumptive counterpart is more acceptable. Rizzi (1990:61) demonstrates that, in Swedish, subject resumptives are commonly (and grammatically) used in structures where a gap would incur an ECP effect (as in (6) below). Resumptives in other positions are either marginal or completely

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unacceptable (as in (7) below).

- (6) *Vilket ord visste ingen hur det/\*\_\_ staves?*  
Which word knew no one how it/\_\_ is-spelled?
- (7) *Kalle kan jag slå vad om \_\_/\*han kommer att klara sig*  
Kalle can I bet about \_\_/he is-going-to succeed.

Rizzi claims that subject resumptives in Swedish behave like syntactic variables. Similarly, Shlonksy (1992) claims that resumptive pronouns are used as a last resort, meaning that they are only sanctioned in cases where wh-movement is prevented from forming an A'-chain by a constraint in the syntax and when the language allows them to be used resumptively (as variables). He argues that this occurs even in languages like Hebrew and Palestinian Arabic, for which resumptive structures are used productively and have a high level of acceptability.

As shown above, much of the existing literature on resumptive pronouns has relied on informal techniques of gathering acceptability judgments. This literature has claimed that resumptive pronouns can save island violations as well as other ungrammatical structures. Some more recent investigations have employed corpora or experimental techniques to examine the resumptive structures that native speakers actually produce and the intuitions of native speakers regarding the acceptability of resumptive structures, respectively. Corpus studies (Prince 1990, 1997; Cann et al. 2004) have shown that native speakers of English do employ resumptive pronouns in production, as demonstrated above by sentences in (1), and by further utterances in (8):

- (8) a. "...those little potato things that you put 'em in the oven..." (Cann et al. 2004:1565)  
b. "I had some other point which I can't remember what it is." (Cann et al. 2004:1554)  
c. "That asshole X, who I loathe and despise the ground he walks on, pointed out that..." (Prince 1990:2)

If we compare the data in (8b-c) to the corresponding sentences with illicit gaps, our intuitions are that resumptives do indeed seem to improve acceptability:

- (9) a. \*I had some other point which I can't remember what \_\_ is.  
b. \*That asshole X, who I loathe and despise the ground \_\_ walks on, pointed out that...

The sentence in (9a) exhibits subject extraction out of a wh-island, creating an ECP effect and violating an island constraint, while (9b) exhibits subject

extraction out of a relative clause island. However, the sentence in (10) with grammatical object extraction from a plain relative clause does not seem any less acceptable than its resumptive-containing counterpart in (8a), and may even be judged as more acceptable (Cann et al. 2004:1554):

- (10) ‘...those little potato things that you put \_\_\_ in the oven...’

These intuitions conform to the claim in the literature that resumptives have a saving or last-resort function, and should only be found more acceptable than gaps when those gaps would be illicit, as in (9).

Regardless of the grammaticality of (1a), (8a) or other, similar structures, the fact that English speakers produce structures with resumptive pronouns in place of illicit gaps might lead us to expect that, in a formal acceptability judgment task, these speakers should judge such resumptive structures to be more acceptable than the corresponding gap-containing structures. However, it is not necessarily the case that speakers judge structures they produce to be acceptable in a comprehension-centered task. Ross (1986:261) points out that, though speakers produce structures with resumptive pronouns, these are often considered to be marginal.<sup>3</sup> Thus, it is important to collect the judgments of linguistically naïve native speakers of English in order to determine the acceptability of structures with resumptive pronouns relative to corresponding structures with gaps.

Surprisingly, the expectation that English speakers should find resumptive pronouns to be more acceptable than island-violating gaps was not met in Alexopoulou and Keller (2007), which tested the acceptability of resumptive pronouns and gaps in English, German, and Greek. Using Magnitude Estimation, Alexopoulou and Keller tested sentences with *wh*-extraction out of object position in non-islands (bare clauses and ‘that’-clauses), weak islands (‘whether’-clauses), and strong islands (relative clauses) (Alexopoulou and Keller 2007:117):

- (11) Non-island condition (bare clause)
- a. Who will we fire  $\emptyset$ /him?
  - b. Who does Mary claim we will fire  $\emptyset$ /him?
  - c. Who does Jane think Mary claims we will fire  $\emptyset$ /him?
- (12) Non-island condition (‘that’-clause)
- a. Who does Mary claim that we will fire  $\emptyset$ /him?
  - b. Who does Jane think that Mary claims that we will fire  $\emptyset$ /him?

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<sup>3</sup> See also Ferreira and Swets (2005) for discussion of a study on the production and comprehension of resumptive pronouns. Though subjects produced structures with resumptive pronouns, these were judged to have relatively low acceptability in the sentence judgment component of the study.

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- (13) Weak island condition ('whether'-clause)  
a. Who does Mary wonder whether we will fire  $\emptyset$ /him?  
b. Who does Jane think that Mary wonders whether we will fire  $\emptyset$ /him?
- (14) Strong island condition (relative clause island)  
a. Who does Mary meet the people that will fire  $\emptyset$ /him?  
b. Who does Jane think that Mary meets the people that will fire  $\emptyset$ /him?

For all conditions, Alexopoulou and Keller found that resumptives were at most as acceptable as the corresponding gaps, but, critically, were never more acceptable. Resumptive pronouns and gaps were equally acceptable in the strong island condition for structures with single and double embedding (as in (14a) and (14b), respectively). In all other structures, gaps were judged to be more acceptable than resumptive pronouns. Through the use of formal, experimental methods designed to systematically and objectively test the acceptability of resumptives and gaps in wh-islands, this study was able to show that the general statement found in the literature, that resumptives 'save' island violations, incorrectly predicts acceptability judgments in the case of wh-object extraction.

A slightly different story is presented in McDaniel and Cowart (1999), which examined the acceptability of resumptive pronouns or gaps in both subject and object position in wh-islands embedded within declarative relative clauses, as in the following examples (McDaniel and Cowart 1999:B16-B18):

- (15) a. That's the girl that I wonder when \_\_ met you.  
b. That's the girl that I wonder when she met you.
- (16) a. That's the girl that I wonder when you met \_\_.  
b. That's the girl that I wonder when you met her.

Their Magnitude Estimation acceptability judgment study found that, for declaratives of this type, resumptives were more acceptable than gaps in subject position (15a < b), while resumptives and gaps were equally acceptable in object position (16a = b). While the gap structures in both (15) and (16) violate a constraint on movement, the gap in (15a) also creates an ECP effect. This finding, especially in conjunction with past theoretical speculation (Rizzi 1990, Shlonksy 1992) regarding the interaction between resumption and the ECP, suggests that more structures in which a gap would violate the ECP should be tested. Because McDaniel and Cowart (1999) tested only structures in which a gap simultaneously creates an ECP effect and violates a wh-island, structures in which a gap would create an ECP effect but not violate an island constraint should be tested. Additionally, as noted in Alexopoulou and Keller (2007), future experiments should test resumptives and gaps in relative clause structures.

## 2 Experiment: Acceptability of Resumptives and Gaps in English Relative Clauses

### 2.1 Experiment Design

The goal of the present experiment is to examine the interaction of three factors: sentence type (plain relative, ‘that’-clause, wh-island, relative clause island), resumption (gap or resumptive), and position (object or subject). Each of these factors was manipulated using a factorial design to create the set of conditions in (17) and (18) below:

#### (17) Object Gap/Resumptive

	Gap	Predicted Relative Acceptability	Resumptive Pronoun
Plain Relative Clause	These are the potatoes that Ted prepared ___.	>	These are the potatoes that Ted prepared them.
‘That’-Clause	These are the potatoes that Ted realized that the chef prepared ___.	>	These are the potatoes that Ted realized that the chef prepared them.
WH-Island	These are the potatoes that Ted inquired how the chef prepared ___.	=	These are the potatoes that Ted inquired how the chef prepared them.
Relative Clause Island	These are the potatoes that Ted flirted with the chef that prepared ___.	=	These are the potatoes that Ted flirted with the chef that prepared them.

#### (18) Subject Gap/Resumptive

	Gap	Predicted Relative Acceptability	Resumptive Pronoun
Plain Relative Clause	This is the chef that ___ prepared the potatoes.	>	This is the chef that she prepared the potatoes.
‘That’-Clause	This is the chef that Ted realized that ___ prepared the potatoes.	<	This is the chef that Ted realized that she prepared the potatoes.
WH-Island	This is the chef that Ted inquired how ___ prepared the potatoes.	<	This is the chef that Ted inquired how she prepared the potatoes.
Relative Clause Island	This is the chef that Ted devoured the potatoes that ___ prepared.	<	This is the chef that Ted devoured the potatoes that she prepared.

Examining the acceptability of structures in which gaps violate only the ECP (subject ‘that’-clause condition) in comparison to structures in which gaps violate both the ECP and an island constraint (subject wh-island and subject relative clause island conditions), and to structures in which gaps violate only island constraints (object wh- and object relative clause island conditions) should provide further insight regarding interactions between resumption and ECP-effects, specifically whether resumptives ameliorate ECP-effects, or certain island violations, or both. Previous work in which resumption has appeared to ameliorate ECP-effects tested only cases where a gap would violate both the ECP and a wh-island constraint (McDaniel and Cowart 1999). Testing the acceptability of resumptive and gapped subject and object plain relative clauses (i.e. structures in which a gap is licit) provides a further point of comparison for sentences in which a gap would violate the ECP or an island constraint. If it is the case that resumptive pronouns ameliorate ECP effects, then resumptive structures should be found more acceptable than gaps for all subject conditions with the exception of the plain relative clause.

## **2.2 Subjects and Materials**

Subjects were 121 undergraduate students at the University of California, San Diego, participating in exchange for course credit. 74 participants were female, 47 were male. All participants were native speakers of English. Using an 11-point scale, each participant judged exactly two tokens from each of 16 token sets developed in a 4x2x2 factorial design (4 sentence types x 2 levels of resumption — gap or resumptive pronoun x 2 positions — subject or object — see (17) and (18) above, with a lexicalized example for each condition). Sentences were displayed one at a time by computer, above the 11-point scale. Each condition was lexicalized 32 times, yielding a total of 512 experimental items (16 conditions x 32 lexicalizations) split using a Latin square method into 16 semi-randomized, counterbalanced lists, each containing 32 experimental sentences. This process ensured that participants saw exactly two sentences of each condition, and that no experimental items judged by any one participant came from the same lexicalization group.

Each subject judged the acceptability of 96 sentences total, 32 of which were experimental stimuli (2:1 filler to experimental ratio). Half of the filler sentences were experimental items from a study on phrasal verbs, and the final 32 sentences were fillers constructed to have a range of acceptability. Additionally, one of several fillers predicted to have a very low level of acceptability was manually placed towards the beginning of each list to counteract possible floor-effects that might arise from the predicted low level of acceptability for several of the experimental conditions.

Participants completed the acceptability judgment task by computer after

completing a brief N-back task.<sup>4</sup> Before starting the acceptability judgment task, subjects read a written description of the task and instructions for how to complete it. They were asked to indicate on a scale from 1 to 11 how bad or good they thought each sentence was, where lower numbers represent worse judgments, higher numbers represent more favorable judgments, and where numbers in the middle of the scale represent sentences that are in between. Participants were asked to read the sentence and quickly choose an appropriate number from the scale to represent their reaction to the sentence, judging three practice sentences before completing the actual acceptability judgment task.

### 3 Results

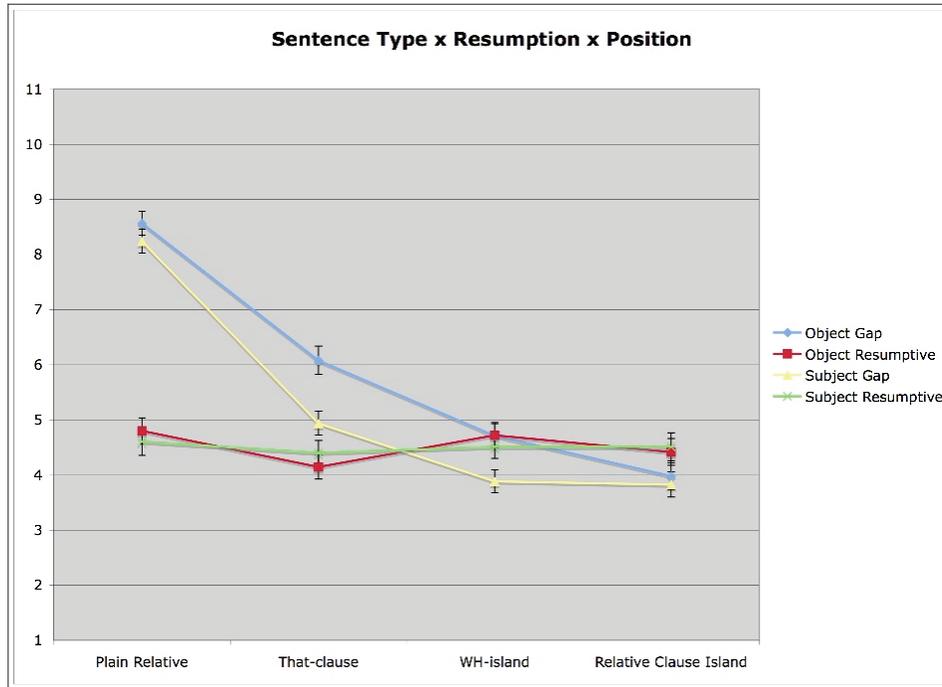
A 3-way by-subjects ANOVA with sentence type (4 levels), position (2 levels), and resumption (2 levels) yielded main effects of sentence type ( $F = 93.75$ ,  $p < 0.001$ ), resumption ( $F=177.2$ ,  $p < 0.001$ ), and position ( $F=12.46$ ,  $p < 0.001$ ), as well as interactions between sentence type and resumption ( $F=102.82$ ,  $p < 0.001$ ), between sentence type and position ( $F=3.47$ ,  $p < 0.05$ ), and between sentence type, resumption and position ( $F=4.13$ ,  $p < 0.01$ ). The interaction between resumption and position was marginal ( $F=3.63$ ,  $p=0.057$ ). By-items analysis found significance for all main effects found in the by-subjects analysis, but interactions between sentence type and position, as well as between sentence type, resumption, and position did not reach significance. Other interactions that reached significance by-subjects also reached significance by-items. General results are summarized in (19) below:

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<sup>4</sup> An N-back task is a task in which participants must remember N items back in order to match previous items to current items. For example, in a 1-back task, if a participant sees the letter A, and the next item is another letter A, the task is to recognize that these items match. Data from this task can be used to separate subjects into high and low working memory groups. This may be useful for the purposes of looking at data from stimuli with long-distances dependencies, as in the current study.

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(19) General results



Post-hoc t-tests were conducted to further investigate interactions. T-test results for significant differences found for position with gaps are summarized in (20):

(20) Post-hoc tests

Sentence Type + Resumption	Subject	Object	<i>p</i> (two-tailed)
'That'-clause + Gap	4.9	6.1	< .001
Wh-island + Gap	3.9	4.7	< .01

(20) Shows subject-object asymmetries found for 'that'-clauses and wh-islands. Subjects preferred 'that'-clauses with object gaps to 'that'-clauses with subject gaps, showing that they exhibit the 'that'-trace effect. This means that, if resumptives do ameliorate structures in which a gap would cause an ECP effect, we should be able to see this effect in the data for 'that'-clauses with subject gaps and resumptives. Subjects also preferred wh-islands with object gaps over wh-islands with subject gaps, which should be unsurprising as the subject gap both violates an island and creates an ECP effect whereas the object gap only violates an island constraint.

T-test results for significant differences found between resumptives and gaps

by sentence type and position are summarized in (21):

(21) T-tests for Resumption Factor Levels

Sentence Type + Position	Gap	Resumptive	<i>p</i> (two-tailed)
Plain Relative + Subject	8.2	4.6	< 0.001
Plain Relative + Object	8.6	4.8	< 0.001
'That'-clause + Subject	4.9	4.4	= 0.087 (NS)
'That'-clause + Object	6.1	4.1	< 0.001
Wh-island + Subject	3.9	4.5	< 0.05
Relative Clause Island + Subject	3.8	4.5	< 0.05

(19) and (21) show that subjects preferred object and subject gaps to object and subject resumptives, respectively, in the plain relative clause condition. They also preferred object gaps to object resumptives in the 'that'-clause condition. A slight preference for subject gaps over subject resumptives in the 'that'-clause condition was marginal, but not significant. Subject resumptive pronouns were preferred over subject gaps in the wh-island conditions and relative clause island conditions.

#### 4 Discussion

The prediction that resumptive pronouns ameliorate ECP effects was only partially confirmed by the results presented in section 4. While resumptive pronouns were more acceptable than gaps in both wh- and relative clause island + subject conditions, there was no significant difference between resumptives and gaps in the 'that'-clause + subject condition. In fact, there was a marginal effect in the opposite direction of what was expected; subjects seemed to prefer gaps to resumptives in subject position of a 'that'-clause embedded in a relative clause.

It seems, then, that resumptive pronouns do not generally save ECP effects any more than they save island effects. The question remains, however, of why resumptives seem to be more acceptable than gaps that simultaneously violate island constraints and create ECP effects. Any analysis of resumptive pronouns in English must account for the following findings from section 4 above:

- (22) a. Resumptive pronouns in English relative clauses seem to have a relatively stable level of acceptability.
- b. Subject and object gaps in plain relative clauses are much more acceptable than subject and object resumptives in plain relative clauses.
- c. Object gaps in 'that'-clauses embedded in relative clauses are more acceptable than object resumptives in 'that'-clauses embedded in relative clauses.

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- d. Object gaps and resumptives in both wh- and relative clause islands are equally acceptable.
- e. Subject gaps in ‘that’-clauses are as acceptable (if not slightly more acceptable) than subject resumptives in ‘that’-clauses. ((18) above)
- f. Subject resumptives in wh- and relative clause islands are more acceptable than subject gaps in wh- and relative clause islands.

If past analyses based on experimental findings from McDaniel and Cowart (1999) or Alexopoulou and Keller (2007) do not account for these facts, an alternative solution must be sought.

McDaniel and Cowart (1999) proposed (as did Kayne 1981) that resumptive pronouns in English are spellouts of traces. This predicts that the derivations of corresponding gap and resumptive sentences such as those in (17) and (18) are the same until movement occurs. After this point, the resumptive sentences are derived from an extra step in which the trace is spelled out. Principles of economy predict that, for sentences in which a trace is licit, the versions of the sentences where the trace is spelled out should fail whereas for sentences in which the trace is illicit, the versions where the trace is not spelled out should fail. This hypothesis was supported by their data, which found that sentences with a resumptive pronoun in subject position of an embedded wh-island were more acceptable than their gapped counterparts, whereas sentences with resumptive pronouns or gaps in object position of an embedded wh-island were found to be equally acceptable. If we are to accept, however, that the gap in subject position of an embedded that-clause is illicit, this analysis is no longer possible, due to the fact that subjects in the current study found sentences with subject gaps in embedded that-clauses to be as or more acceptable than sentences with subject resumptives in embedded that-clauses. While McDaniel and Cowart’s (1999) analysis accounts for (22b-d, f), it does not account for the difference between (22e) and (22f).

Alexopoulou and Keller (2007) propose that the reason their resumptive sentences were never found to be more acceptable than their gapped sentences is that the processing costs incurred by carrying the filler up until the point where the gap/resumptive occurs cannot be undone by the appearance of the resumptive pronoun. This changes the way the sentence is interpreted (anaphorically rather than syntactically/cyclically), but carrying the filler has already taken its toll on the sentence’s acceptability, therefore we should not expect resumption to improve acceptability in cases where there are only island violations. If, however, resumption prevents an ECP effect, as it should if it replaces an illicit subject gap, this could mean that, even if carrying the filler up to the point of the resumptive or gap incurs a processing cost, resumption could still be preferable to gaps that create ECP effects. This analysis appears to work for both wh- and relative clause island conditions; resumption creates no apparent benefit for object position,

while subject resumptives are more acceptable than subject gaps. However, this analysis again fails to account for the lack of difference between subject gaps and resumptives in ‘that’-clauses. While Alexopoulou and Keller’s (2007) analysis accounts for (22b-d, f), it does not account for the difference between (22e) and (22f).

A possible analysis, which may be compatible with Alexopoulou and Keller’s explanation, arises from further consideration of the point in (22a) which underlines the result (depicted in (19) above) that subjects seemed to find resumptive pronouns, regardless of the structure or position in which they occurred among the experimental conditions, to have a relatively steady level of acceptability. Keeping in mind the observation in (22a), (22b-f) are reducible to differences in the acceptability level of gaps in different structures and positions.

Compared to a relatively wide range of acceptability found between gapped sentences, the acceptability of resumptive pronouns, regardless of structure or position, did not seem to fluctuate greatly. The gapped conditions fluctuated in generally expected ways; subject gaps in embedded ‘that’-clauses, wh-islands, and relative clause islands were severely degraded when compared to subject gaps in plain relative clauses, while object gaps in wh-islands were severely degraded when compared to those in plain relative clauses, and those in relative clause islands were found to be even less acceptable than in wh-islands. Subject gaps that created ECP effects and violated island constraints happened to weigh in at a lower level of acceptability than the acceptability level for resumptive pronouns in relative clauses, which creates the illusion that resumptives ‘save’ such structures. Resumptive pronouns certainly did not improve the acceptability of these sentences a great deal, as can be seen in the differences between the means in (27). It could be that, because English has not grammaticized the use of pronouns as ‘true’ resumptives (Sells 1984), structures that contain resumptive pronouns are just consistently rated as marginal, and receive some sort of uniform penalty.

## **5 Conclusions**

Past literature on resumptive pronouns has long assumed that resumption is capable of ‘saving’ island violations, while corpus studies show that English speakers employ resumptive pronouns in various structures, including some in which analogous gaps are licit, such as in plain relative clauses. The present study adds to the body of information accumulating from experimental investigation of the acceptability of resumptive pronouns. It shows that resumptive pronouns do not improve ECP effects or island violations alone. However, resumptive pronouns in English relative clauses in general are more acceptable than island-violating subject gaps, creating an illusion of saving for ECP effects within islands. Further comprehension-centered investigation of resumptive pronouns in

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English should focus on testing the acceptability of resumptives in additional environments to determine whether they do indeed have a steady level of acceptability regardless of embedded structure, and regardless of number of embeddings, possibly using context or auditory stimuli to encourage an informal register. Finally, the connection between the use of resumptive pronouns in production and their acceptability in comprehension should be further explored. It seems unlikely that a structure that is so apparently unacceptable in comprehension should be used in production with any notable level of frequency. Even if future research shows that resumptive pronouns presented aurally or with context are more acceptable than those presented in written form without context, it is curious that when attention is drawn to resumptive pronouns speakers of English find them to be so marginal.

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